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TITLE: Motivators and Barriers to Seeking Prostate Cancer Screening and Treatment
of Urban African-American Men

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14. ABSTRACT African American men are disproportionately affected by prostate cancer. In order to positively impact this disease, early interventions that encourage early detection and treatment are essential. The overall objective of this study is to explore motivators and barriers to seeking prostate cancer screening and treatment among urban African-American men. The proposed study has 2 phases. During phase 1, ethnographic interviews will be conducted with African-American men and other individuals who have insight into their culture. These other individuals could include health care providers and significant others of African-American men. Twenty-two informants were interviewed. After analysis of the qualitative data, the Plowden/Young Prostate Cancer Belief Instrument was refined. Psychometric properties of the instrument will be established, and data collection will begin. The findings will be utilized to design a culturally appropriate intervention that will motivate urban African-American men to seek early prostate cancer screening, participate in clinical trials, and seek effective treatment.						
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Introduction

The overall aim of this 2-phase study is to explore motivators and barriers to seeking prostate cancer screening and treatment among urban African-American men. Ethnographic interviews will be conducted with African-American men and other individuals who have insight into their culture. An estimated 24 individuals will be interviewed. After analysis of the qualitative data, the Plowden/Young Prostate Cancer Belief Instrument will be refined and tested. An additional 120 men will be recruited to complete the instrument. After establishing the psychometric properties of the instrument, results will be analyzed. The results will be used design a culturally appropriate intervention that will motivate urban African-American men to seek early prostate cancer screening, participate in clinical trials, and seek effective treatment. Urban African American men will be recruited for the project. Inclusion criteria will include urban African-American men above the age of 40. The participants must be able to complete a study instrument and participate in a focus group. Exclusion criteria will be any man unable to complete the instrument or participate in an interview. These men will be recruited from community-based organizations in the Baltimore City and surrounding counties.

Motivators and Barriers to Seeking Prostate Cancer Screening and Treatment of Urban African-American Men.

Task 1. Project startup and program development. (Months 1-3)

- a. Meeting with collaborating investigator to discuss interviews. A minimum of weekly meetings will be held between Principle Investigator and collaborator.
- b. Consult with urologists, oncologists, and other health care practitioners to discuss strategies for recruitment of clients for interview and instrument completion.
- c. Consult with community organizations to discuss recruitment of clients.
- d. Purchase laptop computer for data collection.
- e. Hire research staff- research assistant and transcriptionist.
- f. Consult with biostatistician
- g. Estimate content validity of instrument

Task 2. Assess prostate cancer beliefs, motivators, and barriers beliefs of urban African-American men in Baltimore, MD and surrounding counties. (Months 3-9)

- a. Obtain Institutional Review Board approval from University of Maryland, Baltimore.
- b. Recruit African-American men and others for the ethnographic interviews and instrument evaluation.
- c. Conduct interviews to explore motivators and barriers and assess face validity of instrument. Interviews will continue until saturation has been reached (approximately 24 individuals).
- d. Assess psychometric properties of instrument.

- e. Data analysis- qualitative and quantitative
- f. Continue to meet with collaborating investigator to discuss progress, item refinement, and instrument testing.

Task 3. Formulation of Research questions for further evaluation-Idea Award proposal (Months 9-12)

- a. Analyze data gathered from interviews and instrument.
- b. Formulate research question from data.
- c. Submit final report summarizing project to DOD.
- d. Summarize findings for presentation at research conference and scholarly journal.
- e. Begin draft of manuscript and publication.
- f. Design intervention for implementation.

Body:

Based on the recommendations of the Human Subjects Protection Specialist, the project was divided into 2 distinct phases. A separate proposal was submitted for each phase. Phase I of the study has been completed. Informants have been recruited and interviewed. Data analysis has been completed. Phase II of this study will be testing of an instrument developed from phase I data. This report will reflect work completed during phase I and the beginning of Phase II.

Task I: Project startup and program development. (Months 1-3)

A research assistant was hired to assist with data collection and analysis. This individual was a graduate student majoring in community health nursing. Due to the limited number of male students enrolled in the school of nursing, an African American female was hired as a research assistant. Data collection was completed. Dr. Plowden completed his Post-Doctoral studies at Johns Hopkins University and continued to study at the University of Maryland Baltimore County in the department of sociology. During this time, he completed the following classes:

1. Social Epidemiology- This course provided a critical review of social factors influence on health. The information from this course was used to develop survey items related to social issues and health.
2. Statistics- This course was intended to provide a graduate level introduction to social statistics by providing basic training in descriptive and inferential statistics with social science applications. The information from this course was used to design the analysis plan for the survey
3. Survey Development- This course is designed to provide hands on experience in the use of survey techniques in the social sciences. This course covered stages of the survey research process from determining the appropriate research question to investigate, how to determine what is an appropriate sample, modes of administration, question construction, survey layout and ordering, coding and data entry, and analysis. As a component of this course, a survey was developed and pilot tested. The skills were used to developed the proposed survey for this study.
4. Methods of Social Science Research- This course was designed to provide a graduate level understanding of the methodologies used in social science research. The major emphasis was on components of the research process, problem conceptualization, research design, measurement, sampling, qualitative field notes, questionnaire development, modes of data collection, and ethical issues.

These classes were instrumental in further refinement his research skills and in the development of the survey. Dr. Plowden continued to be a member of the Baltimore City Prostate Cancer Demonstration Project. This project is a multidisciplinary initiative at Johns Hopkins School of Public Health as a part of the cigarette restitution fund to decrease prostate cancer disparity among African American men. As a member of this group, Dr. Plowden continued to assist team members with recruitment strategies. Dr. Plowden was instrumental in

developing an interdisciplinary project targeting at risk men. No new Equipment was purchased during this time.

Task II: Assess prostate cancer beliefs, motivators, and barriers beliefs of urban African-American men in Baltimore, MD and surrounding counties. (Months 3-9)

Final Institutional Review Board (IRB) approval for phase I was obtained on November 16, 2001. However, Human Subjects Protection Permission to recruit informants was obtained in January, 2002. The first interview took place on February 20, 2002. Interviews ended February, 2003. Informants were recruited until informational redundancy was reached, that is the point when no new data is gathered from the interviews. For this study, twelve Key Informants and twenty four General Informants were recruited before reaching informational redundancy. All informants were English speaking. Informants were recruited from community organizations (churches, health clinics, and community groups) and word of mouth. Key Informants in the study ranged in age 40-79 (mean 53 years SD 13.5). All Key informants were Black. The majority of the informants was married (50%), employed full time (50%) with insurance and had a household income at or above \$20,000. Fifty percent of the men had participated in prostate screening in the past and were satisfied with the procedure. Two Key Informants has a history of treated prostate cancer. General Informants in the study ranged in age 30-72 (mean 45, SD 11.7). General Informants were significant others, wives, health care providers, and children of at risk men. Thirty-three percent of the General Informants knew someone with prostate cancer, but 58% had received some information about prostate cancer.

After analyzing the data, several social factors were identified as significant motivators of prostate cancer screening for urban Black men. These factors included:

- 1) Kinship/significant others: Kinship has been defined as any significant individuals associated with the informant. For this study, kinship/significant others were defined as family members (parents, siblings, and other blood relatives). Friends were also identified as a significant motivators for the men. Outreach programs should include someone with whom the men can identify with.
- 2) Knowledge: Knowledge was identified as both a facilitator and barrier to seeking screening. Informants believed that education about prostate cancer should begin prior to the recommended screening age. Education should also dispel myths about cancer (ie cancer equating death), symptoms of an enlarge prostate, and the testing procedure. Education allows the men the make informed decisions about screening.
- 3) Media/technology. Most informants received information about prostate cancer via the media, such as radio and/or television. Informants suggested using someone who could get the attention of the men, such as actors, athletes, or politicians. This factor supported the significance of kinship as a motivator for men.

The data were used to design an instrument to assess barriers and motivator to participating in prostate cancer screening and treatment programs.

Task III. Formulation of Research questions for further evaluation-Idea Award proposal.

Based on the data, a proposal was submitted entitled, "Baltimore City Faith-Based Prostate Cancer Prevention and Control Coalition" to the Health Disparity Research- Prostate Scholar Project (W81XWH-04-1-0297). The study was funded and is in year II. The primary purpose of this study is to test an investigator developed community-based intervention that explores the impact of peer-outreach workers on prostate cancer knowledge, perceived benefit and barriers, and overall screening behavior. The target sample for this study will be Black men over age 40 who have never participated in prostate cancer screening. Achievement of this objective will result in an increase in prostate cancer knowledge, an increase in perceived benefit prostate cancer screening and treatment; a decrease in perceived barrier to screening, and an increase in screening among men in the intervention group. Another proposal was developed and submitted to the National Institute of Nursing Research to explore issues related to participation in prostate cancer clinical trials.

Key Research Accomplishments:

- Completion of Phase I and development of survey
- Cognitive testing of survey
- Submission and funding of intervention study
- Completion of Post-Doctoral studies

Reportable Outcomes:

A manuscript has been completed with phase I data. Initial review was done by the Oncology Nursing Forum Journal. The article is currently going through revision based on the initial review. Funding of intervention study by Department of Defense.

Conclusion:

A current myth about Black men is that they are a hard to reach group. Because of this assumption, may be left out of many innovative strategies. By identifying factors associated with prostate cancer among urban Black men, these finding have the potential for increasing enrollment in prevention strategies and impacting the prostate cancer disparity. The need to identify factors that will reduce disparity among racial and ethnic population is the priority for most research agencies. Building on the finding of this study, specific interventions should be developed, tested, and measured quantitatively. Agencies should take an active role in educating communities regarding motivating strategies for urban Black and incorporate them into any outreach activity.

The men in this study expressed an interest in participating in prostate cancer prevention strategies that were culturally appropriate. Outreach activities should strive to create culturally appropriate environment that reduce barriers to participating in screening activities for Black men. Finding from this study and other studies begin to provide insight into reaching Black men and specific motivators. While generalization is limited, this study provides a foundation upon which other intervention might be developed.